

Claims

1. A temporary storage management apparatus for managing temporary storage of content data allowed to be temporarily stored in a recording medium so as to be reproducible only within a prescribed temporary storage allowable time, said temporary storage management apparatus comprising:

association means for associating a first temporary storage start time out of temporary storage start times of prescribed parts of the content data with a reproducible start point indicating a start point from which the content data can be reproduced; and

association changing means for re-associating another temporary storage start time following the temporary storage start time with the reproducible start point every time when a period from the temporary storage start time associated with the reproducible start point to a current time reaches the temporary storage allowable time.

2. The temporary storage management apparatus according to claim 1, further comprising

a volatile memory for storing information of the temporary storage start time associated with the reproducible start time.

3. The temporary storage management apparatus according to

claim 2, wherein

 said volatile memory stores encrypted key data used for encryption of the content data temporarily stored in said recording medium after being encrypted.

4. The temporary storage management apparatus according to claim 1, further comprising:

 information recording means for, when copy allowed content data allowing copy without restrictions or copy one generation is recorded with the content data which is allowed to be temporarily stored, recording history information of temporary storage of the content data and recording of the copy allowed content data in said recording medium; and

 determination means for, when a reproduction disabling detection time which is the temporary storage allowable time before the current time almost matches the temporary storage start time associated with the reproducible start point, determining based on the history information whether the content data was temporarily stored at the reproduction disabling detection time, wherein

 said reproducible range updating means changes the temporary storage start time to be associated with the reproducible start point, depending on a determination result of the determination means, only when the content data was temporarily stored at the reproduction disabling detection time.

5. The temporary storage management apparatus according to claim 1, further comprising

start time extraction means for sequentially extracting the temporary storage start time added to an inter frame encoded image, from the content data comprising video data created by sequentially compressing and encoding the prescribed parts each having a plurality of frame images with a beginning as the inter frame encoded image.

6. A temporary storage management method for managing temporary storage of content data allowed to be temporarily stored in a recording medium so as to be reproducible only within a prescribed temporary storage allowable time, said temporary storage management method comprising:

an association step of associating a first temporary storage start time out of temporary storage start times of prescribed parts of the content data with a reproducible start point indicating a start point from which the content data can be reproduced; and

an association changing step of re-associating another temporary storage start time following the temporary storage start time with the reproducible start point every time when a period from the temporary storage start time associated with the reproducible start point to a current time reaches the temporary

storage allowable time.

7. A temporary management program causing a computer to execute:

an association step of associating a first temporary storage start time out of temporary storage start times of prescribed parts of content data which is allowed to be temporarily stored in a recording medium so as to be reproducible only within a prescribed temporary storage allowable time, with a reproducible start point indicating a start point from which the content data can be reproduced; and

an association changing step of re-associating another temporary storage start time following the temporary storage start time with the reproducible start point every time when a period from the temporary storage start time associated with the reproducible start point to a current time reaches the temporary storage allowable time.